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## Resource Allocation In The University

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#### **ABSTRACT**

Throughout the world today, one major problem facing almost all Universities is that of inadequate resources to support both academic and research work. This is one particular issue which affects both the developed and the developing countries. The magnitude however may vary from country to country and from one University to another.

An attempt has been made in this paper to identify some problems of resource allocation in the University, especially the University in the developing countries, and to offer suggestions.

Keywords: Subvention, oligarchic, bureaucratic collegial, endowment.

### INTRODUCTION

The university as a centre of knowledge has a significant place in every society which has set up such an institution. A lot is expected of the University in shaping the destiny of the nation in various ways. The University is looked upon to lead in the process of development at all levels. The society therefore becomes disillusioned when these aspirations appear not to be fulfilled.

To be able to achieve its aims, a lot of support in the form of financial and material resources is required for the University to deliver the goods. When this support is inadequate or not available, it affects the programmes towards achieving the goals of the University. This is the problem facing most Universities now, and the situation appears to be rather acute in the developing countries where University funding is enitrely the responsibility of the state. Any pressure on the State treasury affects the budget of the University, and its programmes are dislocated.

The University authorities come face to face with the problem of allocating the little resources available to the various departments, sections

and units of the University to achieve the aims and objectives of the institutions. A lot is expected from the University but the resources are just not adequate to support that. Such is the dilemma of our Universities. This issue will be discussed in this paper under the following headings:

- Aims and Objectives of the University
- Resources in the University
- Resource Allocation in the University
- Problems of Resource Allocation in the University
- Suggested Solutions
- Conclusion

## AIMS AND OBJECTIVES OF THE UNIVER-

Universities all over the world have some common aims and objectives of searching for knowledge, preserving knowledge, disseminating knowledge and applying knowledge for the benefit of mankind. This central goal is highlighted in different ways to mean the same thing by various scholars. Lockwood and Davies [5] see the traditional purpose of the University as:

to search for truth, to discover, store and disseminate knowledge, and to be critical of society.

Lord Annan (1975) identifies two main functions of the University: to promote, through reflection and research, the life of the mind, and secondly, to transmit high culture to each generation. According to Stephens and Roderick [9] the principal function of the University is to offer intellectual leadership through criticism and judgement. They see these aims of the University as universally applicable, irrespective of where the University is located.

It should be pointed out, however, that besides these universal goals of high education, peculiar problems and demands of different countries, particularly among the developing countries, place added responsibilities on various Universities to reflect the demands and aspirations of these countries.

Stephens and Roderick [9] mention Wilcox of the United States as emphasising, in an American context, not only the intellectual roles of the University but also the social adaptation in a technological society. They also talk of Walker of Australia as emphasising in addition to the academic roles, preparation for the profession and service to society. They see the Soviet view of higher education as constituting and develop-

ing as an organic component of the unified system of socialist economy, whilst in China, up to the present time, the demand has been that education should serve proletarian politics, integrated with productive labour, with their products becoming, what they call, "socialistic consciousness and culture".

Considering the importance of the University in the achievement of the goals and aspirations of different societies the role of African Universities becomes crucial in view of the numerous problems facing the continent.

A conference on The Development of Higher Education in Africa held in Tananarive, Malagasy Republic in 1962, identified the role of the University in Africa as more than the traditional roles of the University to impart knowledge and undertake research. Apart from maintaining academic Standards of international quality, the Universities in Africa have some responsibilities to:

encourage elucidation and appreciation for African culture and heritage, dispelling misconceptions of Africa through research and teaching of African Studies to ensure the unification of Africa; to ensure the rapid development of the human resources to meet Africa's manpower needs; to develop an awareness of local problems and aspirations; seek avenues to solve the problems and realize the national aspirations, and to evolve a truly African pattern of higher learning dedicated to Africa and its people.

A paper delivered by Sir Eric Asby [1] in an International Seminar on Inter-University Cooperation in West Africa held in Sierra Leone in 1961, identified what he called the prime task of the University in West Africa in the period from the 1960s onwards "to become West African Universities" and with some of their functions to produce the manpower needs of the region and also integrate themselves into West African Society.

On his part, Samba Yacine Cisse, writing on Education in African in the light of the Harare Conference of 1982, which dealt with policy and co-operation in the sphere of education in Africa, organised by Unesco, has stressed the need for African Universities to function and fit better into a new strategy designed to provide training, promote research and restore the cultural identity of African States towards development.

It is clear from the foregoing that a lot is expected from the University, both in the developed and the developing countries, to achieve, to a large extent, the aspirations of the society. This expectation should go with the necessary inputs at all levels for the University to function effectively. However, what the University gets as subvention, in some cases, is so inadequate

that it becomes impossible to make any meaningful planning. The problems that arise out of this situation are enormous, and allocating these meagre resources places an added headache on those charged with that responsibility.

#### RESOURCES IN THE UNIVERSITY

Resources in the University are mainly of two types; human and material. Human resources involve the personnel, both teaching and non-teaching who work together to achieve the goals of the institution. Material resources on the other hand involve items available for the human factor to operate effectively. Material resources may include plant equipment, teaching aids, teaching and research facilities and funds. To a large extent, material resources are tied up with financial resources since the availability of funds can go a long way in bringing about the needed material; this is what this paper is concerned with.

Resource allocation in the University depends on the availability of the resources. In other words, the University allocates to its departments, sections and units what is available. The source of income to the University may vary from one institution to another. In the developing countries greater part of the financial and material resources are provided by the government. It follows, therefore, that availability of resources to the University very much depends on what is generated from within the institution and what external bodies provide.

A paper presented at the Conference of West Africa University Administrators held in Accra, Ghana in 1981, by the Finance Officer of the University of Ghana, Legon, identified the following as the sources of income for the University of Ghana Legon:

- Subvention by government for general recurrent expenditure, capital development, academic and service development.
- ii. Student maintenance grant.
- Tuition and maintenance fees from non-Ghanaian students.
- Miscellaneous Revenue from self-balancing internal activities, examination fees, and income generating activities.
- v. Interest from various endowment trusts.
- vi. Scholarship grants.
- vii. Research contract grants.
- viii. Gifts and donations.
- ix. Loans.
- x. Aid from the Inter-University Council in Brit-

Shattock and Rigby [8] give the source of income to U.K. Universities in 1979/80 as follows:

- i. University Grants Committee allocation
- ii. Tuition fees and support grants

- iii. Endowments, donations and subscriptions.
- w. Local Authority grants.
- v. Computer Board grand
- vi. Research and contracts
- vii. Miscellaneous

The Carnegie Commission on Higher Education in America (1974) gives some idea of how American Universities are funded. The Commission indicates that the traditional sources of revenue have, over the years, come from:

- i. The States
- ii. Local Government
- iii. Tuition
- iv. Private donations

However, according to the Commission, a great deal of the burden is now shouldered by the Federal government. According to the report, the Federal government contribution to higher education in America had risen sharply from \$700 million to \$3.5 billion between 1957 and 1967.

Dr. S.O. Adeyemi, Director of Planning, University of Ibadan said in 1981 that a University could be faced with a number of crises varying in kind and in intensity but, according to him, of these, the "money crisis is the most crucial, since it could be central to the solution or alleviation of almost all others." He gives statistics for the annual budgetary requirements made by the University of Ibadan to the government and the actual amount of money that was given to the University between 1976/77 and 1979/80 as follows.

Year	Estimated Request From Government	Actual Amount Received
1976/77	\$455.3 million	\$27:3 million
1977/78	\$453.4 million	\$25.8 million
1978/79	\$441.8 million	\$22.7 million
1979/80	\$446.4 million	\$26.3 million

The situation at Ibadan University is not an isolated case. The Universities in Ghana face similar problems. Subventions coming to the Universities never match the actual needs of the institutions.

Lockwood and Davis(1985) [5] have indicated that the financial constraints facing the Universities in Britain arises from the wider national context. They explain that University finance reflects the state of the national economy. This observation appears to be relevant to many countries where higher education is funded almost entirely by the government, particularly in the developing countries. This is a clear indication of the type of "crisis" that Universities are going through. The situation is so grave that it affects the whole structure of Higher Educa-

tion. Such a situation does not allow for effective planning and renders the aliocation of resources within the institution rather disturbing. One cannot agree more with Lockwood and Davis when they say, "the pressure and changes that the Universities are experiencing have major consequences for those charged with the task of managing them..."

# RESOURCE ALLOCATION IN THE UNIVERSITY

It is being suggested that Universities are facing difficulties in getting the required resources in order to carry out their duties. What comes in is simply inadequate, and with the demand greater that the supply, there is a problem of allocation of what is available. It follows, therefore, that a great deal of work has to be done to be able to achieve some degree of success. A lot of initiative and resourcefulness should be employed under the circumstance to be able to keep the institution going.

Moodie and Eustace (1974) [6] have stressed the need for a comprehensive management information system, so that most relevant data could be brought together to assist resource allocation decisions. This need, I think, is essential. To be able to allocate the little resources available equitably, certain data should be readily available. For instance; the number of faculties, the number of departments in a particular \*; faculty, the strength of the department or faculty in terms of students and staff as well as the other service units and research units. Becker and Kogan recommend three approaches to resource allocation which Shattock and Rigby [9] consider as "pessimistic". They label them; oligarchic

bureaucratic collegial

They describe the oligarchic pattern as involving an autocratic institutional head, as exists in some institutions, where resource allocation is done to benefit the needs of the basic units who, themselves, form the allocation committee. The bureaucratic approach is explained to mean "hiding budgetary problems under a cloak of arithmetic impartiality." This implies avoiding general discussion on the allocation and instead resorting to automatic allocation based on norms and formulae. The collegial approach involves widespread circulation and acceptance of relevant information with a Committee to oversee the allocation and receive complaints.

Hoenack and Norman [4] (1974) have another pattern of resource allocation which they call the Central Planning Approach. This approach involves Planning - Programming - Budgeting (PPB). The pattern is said to have originated from the US Department of Defence.

It is said to be in use in most Federal and State agencies in America. The Planning procedure entails the generation of programme output and cost information. This approach is intended to help decision-makers to identify programmes whose cost in relation to valued output appear to be high or low. When this is known, the programmes whose costs in relation to valued outputs appear to be high are reviewed, or reduced in size, to support programmes whose cost, in relation to valued output, appear to be low.

In some Universities, a single body is charged with the resource allocation in both the academic and non-academic sectors. This body might be a sub-Committee of Council or representing the interest of the Academic Board, or it might be a joint Committee of both bodies. In others, the Council acts through a Committee which makes a "block grant" to the academic sector and allows the Academic Board or its Committee to allocate resources to the faculties, schools, research units, institutions etc. The collegial pattern appears to be common with many Universities, especially in the developing countries. The University of Science and Technology, Kumasi, follows this pattern. The Standing and Finance Committee, which is a sub-Committee of Council, has the responsibility to allocate resources to all the sections of the University. However, its recommendations are subject to Council's approval. In fact the whole process begins at the Budgetary Committee where Deans, Heads of Department and Directors of Schools meet to discuss budget proposals before they are sent to the Standing and Finance Committee. The University Council gives final approval before the allocation is effected.

This approach appears to be the most effective way to allocate the scarce resources available to the University in order to achieve some degree of balance and fair play without ignoring the vital sectors of the institution.

# PROBLEMS OF RESOURCE ALLOCATION IN THE UNIVERSITY

Economists maintain that when demand is more than supply, prices of the commodity usually shoot up. In this case it is not prices that shoot up, but, that problems are encountered in allocating the limited resources to the areas or demand where the available resources do not match supply.

### Priority Areas

To classify departments in relation to resource allocation itself constitutes a problem. The criteria for determining what constitutes a priority academic area may not be easy to identify. The basis for the classification demands a

rational approach to make it acceptable to all. The point here is that it is is not easy to carry out such an exercise and arrive at an acceptable pattern. How does one rate the Faculty of Science with the Faculty of Pharmacy or the Faculty of Social Sciences with the College of Art? or the Department of Biochemistry with the Department of History? Should one consider the student population in a department as a determining factor or the number of teaching staff in a department? The need to find mutually acceptable principles of resource allocation calls for total involvement of all interested parties in allocating the scarce resources.

Another problem is how to go about the allocation of limited resources to the academic and the non-academic areas. It is a fact that the academic areas in the University constitutes the major centre of action and that the other areas are there to support academic and research work; for that matter, academic issues take precedence over the other areas. Units like the University Hospital and the Library also deserve careful attention when it comes to the allocation of the limited resources. Shattock and Rigby [8] see the University Library as representing a major academic facility, both as an adjunct to undergraduate teaching and as a component in a University's provision for research. They see Library holdings as evidence that Universities are permanent resource centres not only for higher education but also for society as a whole and for the community. It is in the light of this and other factors that make the University Library an important unit in the University set-up. Allocation of resources in the University should therefore reflect the unique position of the University Library and allocation to the Library should be considered accordingly.

One may also talk about the University Hospital as a service unit. The University Hospital caters for students, staff (both teaching and non-teaching) and the general community as a whole. The University Hospital stands out for special consideration in allocating the limited resources because of its role in the University.

The position of major service units like the Central Administration, the University Bookshop, Internal Audit and Development Office also call for consideration in the allocation of scarce resources.

Shattock and Rigby [8] see the "traditional view" of the role of administrative staff in the British Universities as a kind of "academic civil service" servicing committees and the mechanism of University government, as well as implementing decisions. According to them, the Registrar, the Finance Officer and their staff are the people who, in the context of resource allocation, are probably in possession of more infor-

mation than any individual apart from the Vice-Chancellor and they provide the information and advice on the basis of which decisions will be taken. The Central Administration which includes the office of the Vice-Chancellor also calls for consideration when it comes to the allocation of scarce resource.

The University Bookshop, as a major supporting unit for the teaching staff, students and others, also caters for the community in general. The University Bookshop competes effectively for resource allocation.

The last major area to look at is the student body. Unlike some developed countries, most Universities in the developing countries provide residential facilities for students. This means yearly allocation of some resources for the maintenance of infrastructure and social amenities as well as the provision of new ones to cope with the increasing number of students. Resource allocation should therefore take cognis ance of this.

It should be noted at this stage that the areas highlighted so far do not exhaust all the areas of demand which compete for consideration in the allocation of limited resources available to the University. In trying to do the best out of the situation, the attempt to identify priority areas and achieve some balance of allocation, whilst at the same time trying to maintain the academic excellence required of the University - coupled with the obligation to achieve the aims and objectives of the University - constitute a major problem for those charged with the task of resource allocation in the University.

#### SUGGESTED SOLUTIONS

It has been said that Universities in the developing countries rely almost entirely on the State for their financial resources to be able to carry out what is expected of them.

It follows, therefore, that any financial problems of the government have direct or indirect effects on the University. The University should therefore consider this issue critically and find means of generating funds to supplement what comes to the University from outside.

It is time for the Universities to go commercial. They should do more than what they are doing now to sell their services to the community in order to generate additional income. A Head of Department at Hastings College said, "Further education is a marketable product". this statement sums up the aims of the College. Hastings College provides services to the Industries and the community for a charge. A "professional" University like U.S.T. should not be found wanting when it comes to income generation. It is suggested that a special unit in the University, under a Board of experienced

and interested members of staff, should be set up with the necessary guidelines and charged with the organization of income generation activities in such a way that it will benefit the staff involved with the exercise and the University. The pattern of income generation, as it exists in U.S.T. now, in my view, is not effective enough. It needs to be reorganized and effectively executed to bring about better results for the benefit of both the staff and the University.

The University of Manchester (UK) has made a significant breakthrough in this direction. The Vice-Chancellor of the University of Manchester said in 1987 that the University's earnings from outside research had gone from £8.5 million to £15 million annually over the past four years.

Of course the University in a developing country is different from Manchester University in many respects: however, as a University, the best should always be made out of the prevailing situations to justify its position in the society as a University.

It is very important that the University adopts effective cost-saving measures to ensure that the little money that comes to it is used judiciously to achieve the desired results. One way of achieving this objective is to have a reasonable number of supporting staff in the University in order to avoid a situation where the University subvention, which is meant for both capital and recurrent expenditure, is virtually eaten up by salaries of staff to the detriment of vital items like laboratory equipment, books, teaching materials and research. The figures below throw some light on what the situation was in the Universities in Ghana in 1986.

University	No. of Students	No. of Teaching and Top Adminis- trative staff	No. of Supporting Staff
University of Ghana,			0200000
Legon	3416	471	3144
University of Science & Technology,		3	
Kumasi	3302	485	3422
University of Cape Coas	t 1538	196	2258
	8256	1152	8824
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Looking at the trend, there is no doubt that there is a need to take a second look at the employment of the supporting staff in the Universities in Ghana.

In 1986 the government granted ¢6,595,582.60 to the University of Ghana, Legon as subvention. Recurrent expenditure amounted to ¢594,418,187.79. This indicates clearly that the financial resources that came to the University from the government was used up with little left for Academic and Research Work.

It is also suggested that Universities, particularly in the development countries, should have a critical look at the various disciplines in the University to assess the viability or otherwise and the continued retention of some of them. One wonders whether some of these courses have any immediate or long term benefit of solving some of the numerous problems of the developing world. Of course looking at the disciplines the potentialities of the students should not be ignored.

There is a need to monitor closely the allocated resources to ensure that they are used for the purposes envisaged. There is no need to buy air conditioners for the office of a Head of Department or section when there are no reference books or teaching materials in the department or typewriting machines in the office.

Resource allocation in the University has, of late, been a major problem, and from all indications, it appears the trend will continue for sometime to come considering the general economic strains facing the developing countries. As a centre of knowledge, the University should be able to do something positive to save the situation. If the traditional source of income cannot cope with the present demands for finance, that should not be the end of the road. A means should be found.

A solution must be found by the University to be in a position to supplement the efforts of the government. This is a challenge to the University.

### CONCLUSION

I have tried in this paper to suggest that the financial resources available to the University, continuing to dwindle, reflect the general economic trend of the developing countries. The allocation of the limited resources available to the University constitutes a problem for those assigned that responsibility. I have gone further to suggest some means by which, in my view, the problem could be tackled. I am of the view that the University can do a lot to better the situation and it behoves all concerned to play their respective roles effectively to reach that goal.

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